Remarks

Applicants respectfully request reconsideration of the above application in view of the present amendments and the following remarks. Claims 23, 24 and 26-41 are pending in this application. Claims 23, 24, 26, 31, 33, 35, 36, 37, 38, 40 and 41 are being amended and claims 25 and 42 are being canceled herein without prejudice to clarify the claimed invention and to place the claims in better condition for allowance. No new matter has been introduced by virtue of the present amendments.

Applicants thank the Examiner for extending the courtesy of a telephonic interview on April 29, 2003. The Examiner's insightful comments during the interview have been helpful in guiding the Applicants' present amendments and following remarks. As such, Applicants feel that the application is in a position for allowance; and such allowance is respectfully requested.

Objection to Claims 24, 25, 26, 27, 30, 31, 32, 34, 41 and 42 under 35 U.S.C. § 132 As Introducing New Matter Into The Disclosure Of The Invention

Claims 24, 25, 26, 27, 30, 31, 32, 34, 41 and 42 are objected to under 35 U.S.C. § 132 as introducing new matter into the disclosure of the invention.

With respect to claims 24, 25, 41 and 42, the Examiner states that there is no mention in the specification of a "global estimation" and insufficient data as to what it is. Without acquiescing to the Examiner's objection, Applicants amend claims 24 and 41 and cancel claims 25 and 42 to remove reference to the term "global estimation", thus obviating the Examiner's ground of objection.

With respect to claims 25 and 42, the Examiner states that there is no mention of a linear regression in the original specification. Without acquiescing to the Examiner's objection, Applicants cancel claims 25 and 42 to remove reference to the term linear regression, thus obviating the Examiner's ground of objection.

With respect to claims 26 and 41, the Examiner states that there is no mention of a "neural network" in the specification as filed. Neural networks is a term of art that is disclosed in the specification. For example, according to the specification as filed, a method is disclosed "combining the use of global estimation using regression or neural networks with a local search mechanism, such as enhanced K-nearest neighbor." Page 5, Lines 22-25. Using the term "neural networks" in claims 26 and 41 does not introduce new matter into the disclosure. Therefore, Applicants respectfully ask the Examiner to remove this ground of objection.

With respect to claim 30, the Examiner states that there is no mention in the specification as filed of a limit if a difference of "3,000 miles" as a factor. This limit is disclosed in the specification as filed. For example, "Neighbor constraints 14 are constraints, such as the vehicle must be the same model and make, model year, and vehicle series, and the difference in mileage must be less than 3,000 miles." Page 8, Lines 16-19. Using a difference of 3,000 miles as a constraint in claim 30 does not introduce new matter into the disclosure. Therefore, Applicants respectfully ask the Examiner to remove this ground of objection.

With respect to claims 27, 32 and 34, the Examiner states that there is no mention of a "resale channel" in the original specification. This term is disclosed in the specification as filed. For example, "each record in historical database 12 contains information regarding the resale of the used vehicles, such as a resale date, region, mileage, condition, resale channel, and resale price." Page 8, Lines 12-15. Using the term resale channel in claims 27, 32 and 34 does not introduce new matter into the disclosure. Therefore, Applicants respectfully ask the Examiner to remove this ground of objection.

With respect to claim 31, the Examiner states that there is no previous mention of "planned resale information". Applicants amend claim 31 to recite "resale plan information", instead of "planned resale information", to clarify the claimed invention. The term "resale plan information" is disclosed in the specification as filed. For example, "the resale plan information is not mandatory but is helpful for arriving at a more accurate market value estimation." Page 9, Lines 8-10. Using the term resale plan information in claim 31

does not introduce new matter into the disclosure. Therefore, Applicants respectfully ask the Examiner to remove this ground of objection.

Rejection of Claims 24, 25, 27 and 30-42 under 35 U.S.C. § 112, ¶ 1, As Lacking Written Description

Claims 24, 25, 27 and 30-42 are rejected under 35 U.S.C. § 112, ¶ 1, as containing subject matter which was not described in the specification in such a way to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

According to *Lockwood v. American Airlines, Inc.*, 41 U.S.P.Q.2d 1961, 1966 (Fed. Cir. 1997):

> An Applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention.

According to M.P.E.P. § 2163(B.) (Eighth Edition, Rev. 1. Feb. 2003), "newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure."

With respect to claims 24, 25, 41 and 42, the Examiner states that there is no mention in the specification of a "global estimation" and insufficient data as to what it is. Without acquiescing to the Examiner's rejection, Applicants amend claims 24 and 41 and cancel claims 25 and 42 to remove reference to the term "global estimation", thus obviating the Examiner's ground of rejection.

With respect to claims 25 and 42, the Examiner states that there is no mention of a linear regression in the original specification. Without acquiescing to the Examiner's rejection, Applicants cancel claims 25 and 42 to remove reference to the term linear regression, thus obviating the Examiner's ground of rejection.

With respect to claims 26 and 41, the Examiner states that there is no mention of a "neural network" in the specification as filed. Neural networks is a term of art that is explicitly disclosed and supported in the specification. For example, according to the specification as filed, a method is disclosed "combining the use of global estimation using regression or neural networks with a local search mechanism, such as enhanced K-nearest neighbor." Page 5, Lines 22-25. Therefore, Applicants respectfully ask the Examiner to remove this ground of rejection.

With respect to claim 30, the Examiner states that there is no mention in the specification as filed of a limit if a difference of "3,000 miles" as a factor. This limit is explicitly disclosed and supported in the specification as filed. For example, "Neighbor constraints 14 are constraints, such as the vehicle must be the same model and make, model year, and vehicle series, and the difference in mileage must be less than 3,000 miles." Page 8, Lines 16-19. Therefore, Applicants respectfully ask the Examiner to remove this ground of rejection.

With respect to claims 27, 32 and 34, the Examiner states that there is no mention of a "resale channel" in the original specification. This term is explicitly disclosed and supported in the specification as filed. For example, "each record in historical database 12 contains information regarding the resale of the used vehicles, such as a resale date, region, mileage, condition, resale channel, and resale price." Page 8, Lines 12-15. Therefore, Applicants respectfully ask the Examiner to remove this ground of rejection.

With respect to claim 31, the Examiner states that there is no previous mention of "planned resale information". Applicants amend claim 31 to recite "resale plan information", instead of "planned resale information" to clarify the claimed invention. The term "resale plan information" is explicitly disclosed and supported in the specification as filed. For example, "the resale plan information is not mandatory but is helpful for arriving at a more accurate market value estimation." Page 9, Lines 8-10. Therefore, Applicants respectfully ask the Examiner to remove this ground of rejection.

With respect to claims 33, 35 and 36, the Examiner states that the formulae in these claims are incomplete. The Examiner opines that while these claims list variable to be used, they do not explain how to use the variables, as there is no mention in the specification as to how to combine the variable to achieve the stated results, there is no way to use these claims. Applicants believe that the Examiner has reject claims 34 and 37-42 as depending on at least one of claims 33, 35 and 36. Since ample written description is provided to support the formulae in claims 33, 35 and 36, Applicants respectfully ask the Examiner to withdraw the written description rejection as to these claims and depending claims 34 and 37-42.

Independent claim 33, once amended, recites a computer-implemented method for estimating value of a used vehicle. The method contemplates using a group of parameters that the Applicants have assigned variable names in order to clarify the claimed invention. V_1 equals data from a historical database comprised of a number N of used vehicle records. Page 7, Lines 25-26 ("a historical database of used vehicles"). v_1 equals a used vehicle record in V_1. Page 8, Lines 6-9 ("historical database ... includes a plurality of records ... [of] used vehicle[s]"). f_1 equals a plurality of vehicle features of v_1. Page 8, Lines 8-10 ("plurality of records ... include a complete description of all the features ... of each used vehicle"). V_2 equals a data set comprised of at least one target used vehicle record. Page 8, Lines 2-4 ("a set of used vehicles (target vehicles) ... whose market value is to be estimated/predicted"). v_2 equals a target used vehicle record. Page 9, Lines 3-8 ("set of .. target vehicles ... contains detailed descriptions ... of each used vehicle"). f_2 equals a plurality of vehicle features of v_2. Page 9, Lines 3-8 ("set of used vehicles ... contains detailed descriptions of the features"). Const equals an at least one constraint for determining a neighbor relationship between a pair of used vehicles. Page 7, Lines 26-29 ("a set of neighbor constraints ... or maximum acceptable differences for a pair of vehicles to be considered neighbors"). F_d equals a neighborhood distance function for determining a distance between a pair of used vehicles. Page 8, Lines 22-26 ("distance functions ... are formulas which map or correlate a difference in features or vehicle contents between the pair of vehicles to an amount of used vehicle resale value"). K equals a nearest neighbor value. Page 9, Lines 20-22 ("the estimation accuracy of the current K value is evaluated using only the vehicles in the historical database"). $Error_P$ equals a previous estimation error. Page 9, Lines 17-18 ("previous error is set to a large

number"). $Error_K$ equals a used vehicle market error. Page 9, Lines 24-25 and Page 10, Line 1 ("an average estimation error for the current K number of neighbors is computed ..., [this] estimation error is assigned to a variable $error_K$").

According to claim 33, step A recites receiving data which includes: V_1 comprised of a number N of v_1, each v_1 comprising resale information and f_1, V_2 comprised of at least one v_2, each v_2 comprised of f_2, Const, F_d, K, and $Error_P$. The data is explicitly disclosed and supported by the written description, as described in detail above. Receiving such data is also supported by the specification and knowledge of one reasonably skilled in the art. Page 7, Line 25 ("[the] ... process ... requires the following inputs").

According to claim 33, step B recites determining an $Error_K$ based on V_1, Const, F_d, and K. The following passages from the original specification describe this determination step in such a way to use it (please note the variables v_1 and v_2 are used in a different context than claim 33):

> At block 34, the estimation accuracy of the current K value is evaluated using only the vehicles in the historical database 12. This step will be described in further detail hereinafter [on Page 11, Lines 25-29 and Page 12, Lines 1-11]. At block 36 an average estimation error for the current K number of neighbors is computed by dividing the sum of errors for all vehicles in historical database 12 by the total number of vehicles in historical database 12. This generates the average estimation error associated with the current value of K. The computed average estimation error is assigned to a variable $error_K$.
>
> Page 9, Lines 2-29 and Page 10, Line 1.
>
> where for each neighbor vehicle there is computed an estimation for the market value of the target vehicle by adjusting the known value of neighbor vehicle based on the distance function. At block 68, a distance-weighted average of all the adjusted known market value estimations is used to generate the final market value estimation for the target vehicle. For example, if there are three neighbors v_1, v_2 and v_3 and the distances are d_1, d_2 and d_3, respectively, then the weights for v_1, v_2 and v_3 are $W_1 = D_1/(D_1+D_2+D_3)$, $W_2 = D_2/(D_1+D_2+D_3)$, and

> $W_3 = D_3/(D_1 + D_2 + D_3)$ where $D_1 = (d_1 + d_2 + d_3)/d1$, $D_2 = (d_1 + d_2 + d_3)/d_2$ and $D_3 = (d_1 + d_2 + d_3)/d_3$. Finally, at block 70, the estimation error for the target vehicle is calculated by taking the difference between the estimated value and the actual resale price for the target vehicle.
>
> Page 11, Lines 25-29 and Page 12, Lines 1-11.

According to claim 33, step C recites "if $Error_K$ is less than about $Error_P$, then (C1) determining an estimated value for each v_2 in V_2 based on V_1, V_2, Const, F_d, and K, (C2) setting K to K plus 1 and $Error_P$ to $Error_K$, and (C3) looping to step (B). The following passage from the original specification describes this iterative determination step in such as way to use it:

> The average estimation error is checked for improvement, as represented by block 38. More specifically, it is determined whether $error_K$ is less than the previous error. If $error_K$ is less than the previous error, than the previous error is set equal to $error_K$, as represented by block 40. However, if $error_K$ is not less than the previous error, then the DWNN process is stopped and the market value estimations using the previous K are considered to be the most accurate values, as represented by blocks 38 and 48.
>
> Page 10, Lines 1-11.

Accordingly, since claim 33 is supported by the written description as originally filed, Applicants respectfully request that the Examiner withdraws the ground of rejection based on lack of written description.

With respect to claim 35, step B of claim 33 is described in greater detail. Parameters not included in claim 33 are introduced in claim 35. These parameters are given variable names to clarify the claimed invention. The parameters are supported by the written description as originally filed. V' refers to a neighbor group. Page 11, Lines 10-12 ("all vehicles in historical database ... which satisfy the neighbor constraints ... are located and saved"). v' refers to a used vehicle in the V' set. Page 11, Lines 10-12 ("all vehicles in historical database ... which satisfy the neighbor constraints ... are located and saved").

According to claim 35, once amended, for each v_1 in V_1, (B11) a neighbor group V' of K used vehicles v' for v from V_1 based on Const, F_d, and f_1 is determined, (B12) for each v' in V', a weighted estimated value for v_1 based on v', f_1 and F_d is determined, (B13) an estimated value for v_1 based on each weighted estimated value of v_1 is determined, (B14) an estimated error for v_1 based on the estimated value for v_1 and the resale price of v_1, and (B2) $Error_K$ based on the estimated error for each v_1 in V_1, and N is determined. Applicants refer to the portions of the original specification cited above (Page 9, Lines 2-29; Page 10, Line 1; Page 11, Lines 25-29 and Page 12, Lines 1-11.) in support of claim 35. These passages clearly support and describe the subject matter of claim 35. As such, Applicants respectfully request that the Examiner withdraws the ground for rejection based on lack of written description.

With respect to claim 36, step C of claim 33 is described in greater detail. Parameters not included in claim 33 are introduced in claim 36. These parameters are given variable names to clarify the claimed invention. The parameters are supported by the written description as originally filed. V" is a group of nearest neighbor vehicles. Page 12, Lines 22-24. ("only a K number of nearest neighbors in the neighborhood subset are selected based on the distances calculated"). v" refers to a used vehicle in the V" set. Page 12, Lines 22-24. ("only a K number of nearest neighbors in the neighborhood subset are selected based on the distances calculated").

According to claim 36, once amended, for each v_2 in V_2, (C11) a nearest neighbor group V" of K used vehicles v" for v_2 from V_1 based on Const, F_d, f_1, and f_2 is determined, (C12) for each v" in V", a weighted estimated value for v_2 based on v", F_d, f_1, and f_2 is determined, and (C13) an estimated value for v_2 based on each weighted estimated values of v_2 is determined. The following passage from the original specification describes these determination steps in such a way to use them:

> Referring now to Figure 4, a flowchart illustrating the steps for estimating the market value for all the used vehicles (target vehicles) 20 whose market value is unknown is illustrated, in accordance with the present invention. At block 80, all vehicles in the historical database 12 that satisfy the neighbor constraints 14 are found and segregated into a neighborhood subset. The

distance between each neighbor vehicle in the neighborhood subset and the target vehicle whose market value is to be estimated is determined. However, only a K number of nearest neighbors in the neighborhood subset are selected based on the distances calculated, as represented by block 82. At block 84, it is determined whether there are enough neighbors to conduct a market value estimation. If there are not a K number of neighbors available, then the target vehicle is rejected and another target vehicle in used vehicles set 20 is selected, and the process repeats itself as represented by blocks 84, 92 and 80.

However, if there are enough neighbors, then a market value for the target vehicle is estimated for each neighbor vehicle in the neighborhood subset. The market value estimation is calculated by adjusting the value of each neighbor by a market value dollar amount determined using the distance function 18, as represented by block 86. At block 88, a distance-weighted average of all market value estimations are computed to generated a final estimation for the target vehicle. For example, in a similar manner as described above, if there are three neighbors v_1, v_2 and v_3 and the distances are d_1, d_2 and d_3, respectively, then the weights for v_1, v_2 and v_3 are $W_1 = D_1/(D_1 + D_2 + D_3)$, $W_2 = D_2/(D_1 + D_2 + D_3)$, $W_3 = D_3/(D_1 + D_2 + D_3)$ where $D_1 = (d_1 + d_2 + d_3)/d_1$, $D_2 = (d_1 + d_2 + d_3)/d_2$ and $D_3 = (d_1 + d_2 + d_3)/d_3$. Finally, at block 90, the target vehicle whose market value has been estimated is added to the used vehicle data set 22.

Page 12, Lines 12-29 and Page 13, Lines 1-20.

Accordingly, since claim 36 is supported by the written description as originally filed, Applicants respectfully request that the Examiner withdraws the ground of rejection based on lack of written description.

Rejection of Claims 23-42 under 35 U.S.C. § 103(a)
as Being Obvious in Light of Nada's Web Page

Claims 23-42 have been rejected under 35 U.S.C. § 103(a) as being obvious in light of NADA's web page ("NADA") which discloses a method of determining a vehicle's price. According to the Examiner, NADA discloses a method for determining a vehicle's price which includes checking historical values for cars and using these values to generate values for

autos. Although the Examiner does not provide evidence that error adjusting is necessarily present in the NADA method, the Examiner urges that error is inherent. The Examiner also states that NADA is regarded as one of the best sources for automobile prices because they have low error. According to the Examiner, NADA compares comparable vehicles for their prices and adjusts the prices for the estimation vehicle. The Examiner states that a price for average and prices for clean, rough, wholesale are listed. Therefore, the Examiner urges that the values are distance-weighted from the average price.

In response to the Applicants arguments in reply to the first Office Action, the Examiner states that NADA uses the same criteria as claimed for assigning value to a used car. According to the Examiner, it is inherent in the use of the NADA book that the user would be comparing the values to a specific car and weighting for various factors. According to the Examiner, NADA inherently discloses many of the features as claimed in the instant application, such as a number "K" of vehicles, the number "K" being how many they used to formulate their data.

NADA's website does not teach, disclose, or suggest the invention as recited in claims 23, 24 and 26-41. The historical database disclosed by NADA does not consist of a number K of used vehicle nearest neighbor records. NADA does not determine an estimated value for target used vehicles based on the data from the historical database consisting of a number K of used vehicle nearest neighbor records. Applicants have amended claim 23 to clarify their invention in light of these features. Amended claim 23 recites receiving a nearest neighbor database of a number K of used vehicles. According to claim 23, the number K is iteratively selected for estimation accuracy based on a historical database of N used vehicle records. The other pending independent claim, claim 33, sets forth the iterative nearest neighbor aspect of the Applicants invention in algebraic form.

These claimed features overcome the difficulties and shortcomings of NADA's method by using a local search mechanism. NADA uses a data set of comparable vehicles whereas the Applicants control the number of comparable vehicles, *i.e.*, nearest neighbors, that are used in the estimation process to provide the most accurate estimation of market value.

One feature of the Applicants' invention as recited in claims 23 and 33 is to select the best value for K such that the estimation error is minimized. NADA does not minimize estimation error based on selecting the best value for K, *i.e.*, the number of nearest neighbors, if it minimizes error at all. Similarly, the method recited in claim 33 describes the method for minimizing error by selecting the best value for K, the number of nearest neighbors, and using this number of nearest neighbors as the basis for determining a used vehicle's market value. For at least these reasons, the Applicants' claimed invention is patentable in light of NADA.

Furthermore, one of ordinary skill in the art would not be motivated to modify NADA to provide the Applicants' invention as recited in claims 23, 24 and 26-41. As acknowledged by the Examiner, NADA computes an average price based on comparable vehicles which is adjusted based on vehicle condition, whereas the Applicants' claimed method determines a subset of comparable vehicles, referred to as nearest neighbors, which are used as the basis for distance weighting to obtain very accurate price estimates. Notably, NADA teaches away from the nearest neighbor concept by accounting for variations from average based solely on list prices for clean, rough, and wholesale vehicles. As acknowledged by the Examiner, NADA's method for determining vehicle prices provides one of the best sources for automobile prices, leaving one of ordinary skill in the art unmotivated to improve on NADA's estimation method. However, Applicants' claimed invention is an improvement over NADA by using the nearest neighbor concept in addition to distance weighting adjustments. For at least these reasons, Applicants contend that claims 23, 24 and 26-41 are patentable in light of the teachings of NADA.

CONCLUSION

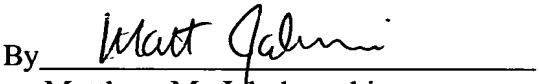
For the foregoing reasons, Applicants believe that the Office Action of March 10, 2003 has been fully responded to. The present amendments was not earlier presented because the amendment and argument submitted with the prior amendment addressed all stated grounds for rejection in the prior office action. The present amendments and remarks are directed at further illustrating that the Applicants' claimed nearest neighbor feature is patentable. The Examiner has already conducted a search on this concept since it was recited

in the original claims. Therefore, the present invention does not raise any new issues for search or consideration and does not require any further searching by the Examiner. As such, Applicants submit that the amendment is appropriate for entry, and that the claims are in a condition for allowance. If the Examiner believes that a telephone conference will advance prosecution of this application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

The Commissioner is hereby authorized to charge any fees associated with the filing of this paper to the deposit account of Ford Global Technologies, Inc., Account No. 06-1510.

Respectfully submitted,

JIE CHENG, ET AL

By 

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Attachment

VERSION WITH MARKINGS TO SHOW CHANGES MADE

23. (Once Amended) A computer-implemented method for estimating market value of a used vehicle, the method comprising:

A) receiving data from a [historical] nearest neighbor database consisting of a number K of used vehicle nearest neighbor records, each used vehicle nearest neighbor record comprising resale information and a plurality of used vehicle features, at least one target used vehicle record comprised of a plurality of used vehicle features, at least one constraint for determining a neighbor relationship between a pair of used vehicles, and a neighborhood distance function for determining a distance between a pair of used vehicles, the number K is iteratively selected for estimation accuracy based on a historical database of N used vehicle records; and

B) determining an estimated value for the at least one target used vehicle based on the data from the [historical] nearest neighbor database, the at least one target used vehicle record, the at least one constraint, and the neighborhood distance function,

wherein the estimated value of the at least one target used vehicle is relied upon by individuals to at least price used vehicles for resale.

24. (Once Amended) The method of claim 23 wherein the determining step includes the use of [global estimation using] neural networks.

26. (Once Amended) The method of claim 23, wherein determining step B) is comprised of:

B1) for each used vehicle nearest neighbor record in the [historical] nearest neighbor database, determining a weighted estimated value for the used vehicle nearest neighbor based on the data from the [historical] nearest neighbor database, the at least one target used vehicle record, the at least one constraint, and the neighborhood distance function; and

B2) determining an estimated value for the at least one target used vehicle based on the weighted estimated values for the number K of used vehicle nearest neighbors.

31. (Once Amended) The method of claim 30, wherein the at least one used vehicle record further comprises [planned] resale plan information.

33. (Once Amended) A computer-implemented method for estimating market value of a used vehicle, the method comprising:

A) receiving data which includes:

V_1 comprised of a number N of [v^1] $\underline{v}_1$, each [v^1] $\underline{v}_1$ comprising resale information and [f^1] $\underline{f}_1$, V_2 comprised of at least one [v^2] $\underline{v}_2$, each [v^2] $\underline{v}_2$ comprised of [f^2] $\underline{f}_2$, Const, F_d, K, and $Error_P$;

B) determining an $Error_K$ based on V_1, Const, F_d, and K; and

C) if $Error_K$ is less than about $Error_P$, then

C1) determining an estimated value for each [v^2] $\underline{v}_2$ in V_2 based on V_1, V_2, Const, F_d, and K;

C2) setting K to K plus 1 and $Error_P$ to $Error_K$; and

C3) looping to step B),

wherein:

V_1 equals data from a historical database comprised of a number N of used vehicle records,

$[v^1]$ $\underline{v}_1$ equals a used vehicle record in V_1,

$[f^1]$ $\underline{f}_1$ equals a plurality of vehicle features of $[v^1]$ $\underline{v}_1$,

V_2 equals a data set comprised of at least one target used vehicle record,

$[v^2]$ $\underline{v}_2$ equals a target used vehicle record,

$[f^2]$ $\underline{f}_2$ equals a plurality of vehicle features of $[v^2]$ $\underline{v}_2$,

Const equals an at least one constraint for determining a neighbor relationship between a pair of used vehicles,

F_d equals a neighborhood distance function for determining a distance between a pair of used vehicles,

K equals a nearest neighbor value,

$Error_P$ equals a previous estimation error, and

$Error_K$ equals a used vehicle market error,

wherein the estimated value of each $[v^2]$ $\underline{v}_2$ in V_2 is relied upon by individuals to at least price used vehicles for resale.

35. (Once Amended) The method of claim 33 wherein step B) is comprised of:

B1) for each $[v^1]$ $\underline{v}_1$ in V_1,

B11) determining a neighbor group $[V^*]$ $\underline{V'}$ of K used vehicles $[v^*]$ $\underline{v'}$ for v from V_1 based on Const, F_d, and $[f^1]$ $\underline{f}_1$;

B12) for each $[v^*]$ $\underline{v'}$ in $[V^*]$ $\underline{V'}$, determining a weighted estimated value for $[v^1]$ $\underline{v}_1$ based on $[v^*]$ $\underline{v'}$, $[f^1]$ $\underline{f}_1$ and F_d;

B13) determining an estimated value for $[v^1]$ $\underline{v}_1$ based on each weighted estimated value of $[v^1]$ $\underline{v}_1$;

B14) determining an estimated error for $[v^1]$ $\underline{v}_1$ based on the estimated value for $[v^1]$ $\underline{v}_1$ and the resale price of $[v^1]$ $\underline{v}_1$; and

B2) determining $Error_K$ based on the estimated error for each $[v^1]$ $\underline{v}_1$ in V_1, and N.

36. (Once Amended) The method of claim 33 wherein step C1) is comprised of:

for each $[v^2]$ $\underline{v}_2$ in V_2,

C11) determining a nearest neighbor group $[V^{**}]$ $\underline{V''}$ of K used vehicles $[v^{**}]$ $\underline{v''}$ for $[v^2]$ $\underline{v}_2$ from V_1 based on Const, F_d, $[f^1]$ $\underline{f}_1$, and $[f^2]$ $\underline{f}_2$;

C12) for each $[v^{**}]$ $\underline{v''}$ in $[V^{**}]$ $\underline{V''}$, determining a weighted estimated value for $[v^2]$ $\underline{v}_2$ based on $[v^{**}]$ $\underline{v''}$, F_d, $[f^1]$ $\underline{f}_1$, and $[f^2]$ $\underline{f}_2$;

C13) determining an estimated value for $[v^2]$ $\underline{v}_2$ based on each weighted estimated values of $[v^2]$ $\underline{v}_2$.

37. (Once Amended) The method of claim 36 further comprising C14) storing $[v^2]$ $\underline{v}_2$ with the estimated value for $[v^2]$ $\underline{v}_2$ in a data set V_3 of used vehicles $[v^3]$ $\underline{v}_3$ with estimated market values.

38. (Once Amended) The method of claim 33, wherein $[f^1]$ $\underline{f}_1$, and $[f^2]$ $\underline{f}_2$ include at least two items selected from the group consisting of vehicle type, model, series, trim level, engine type, transmission type, moon roof equipped, leather interior, interior color, and exterior color.

40. (Once Amended) The method of claim 39, wherein each $[v^2]$ $\underline{v}_2$ further comprises planned resale information, wherein the planned resale information includes at least one item selected from the group consisting of intended resale date, region and resale channel.

41. (Once Amended) The method of claim 33, wherein the determining step C1) includes the use of [global estimation using] neural [network] networks.